

Name: _____

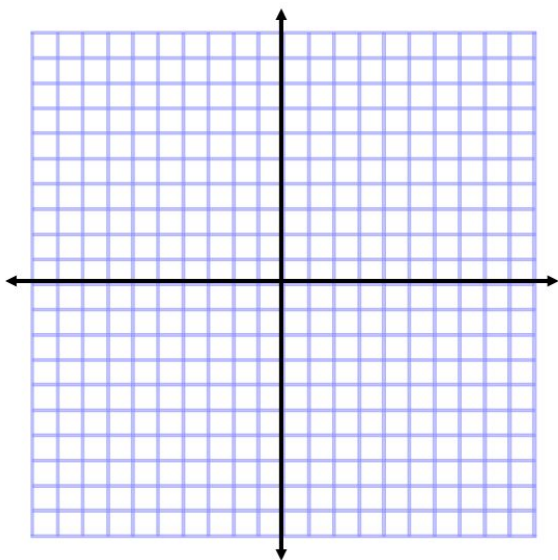
Date: _____

Graphing/Inequality Review!

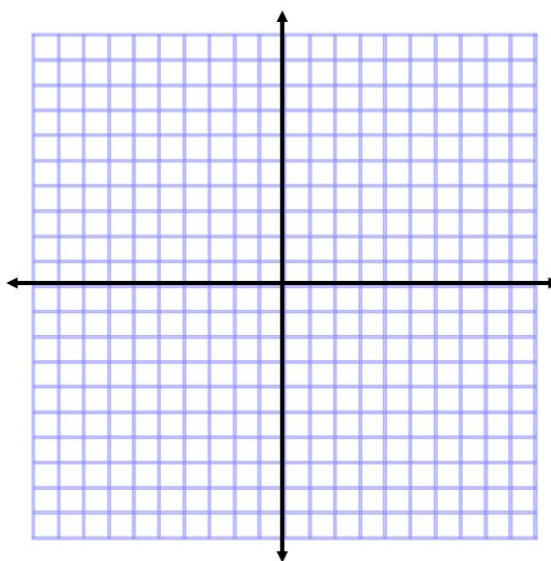
Part One: Graph each linear equation. Be sure to extend and name your lines.

Use a straight edge!

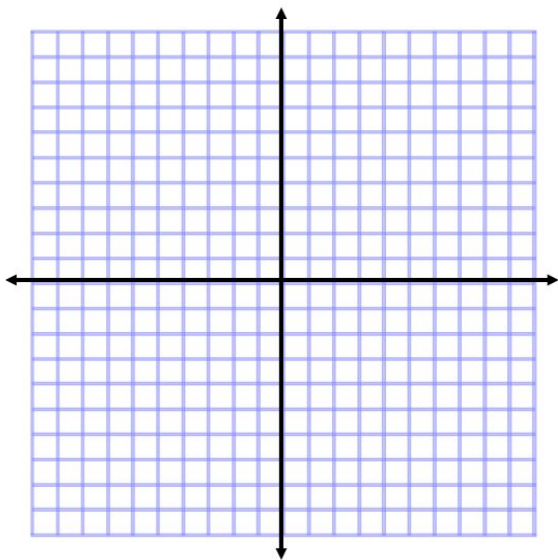
1. $y = -x + 2$



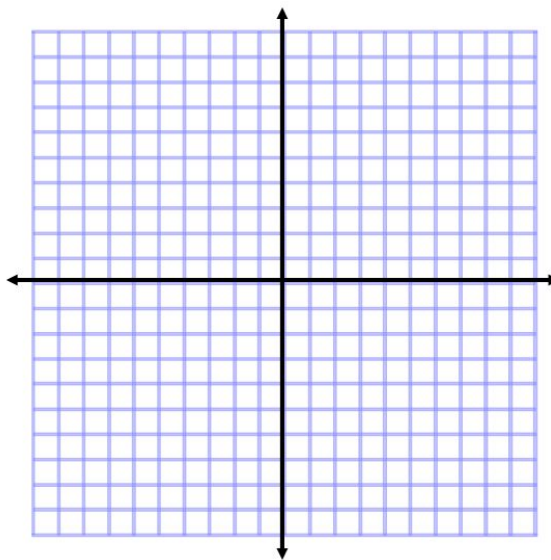
2. $y = \frac{-4}{5}x - 1$



3. $y = 7x$



4. $y = x - 3$



Part Two: Write in slope-intercept form, then graph. An example has been done for you.

Example: $-\frac{1}{5}x + y = -8$

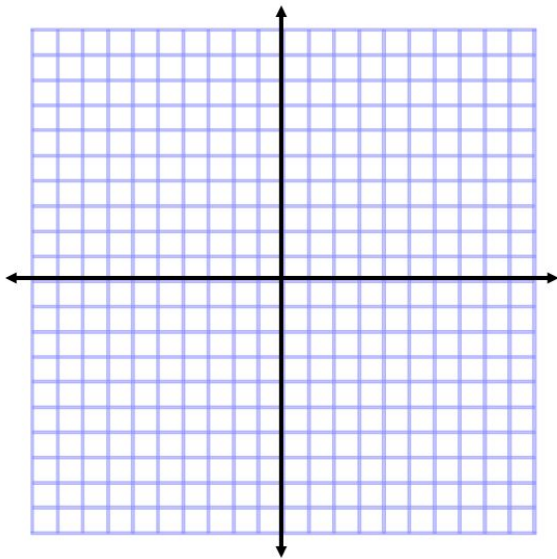
- To write this in slope-intercept form, I must isolate y (so the equation will look like $y = mx + b$).
- I will add $\frac{1}{5}x$ to both sides of the equal sign.

$$-\frac{1}{5}x + y = -8$$

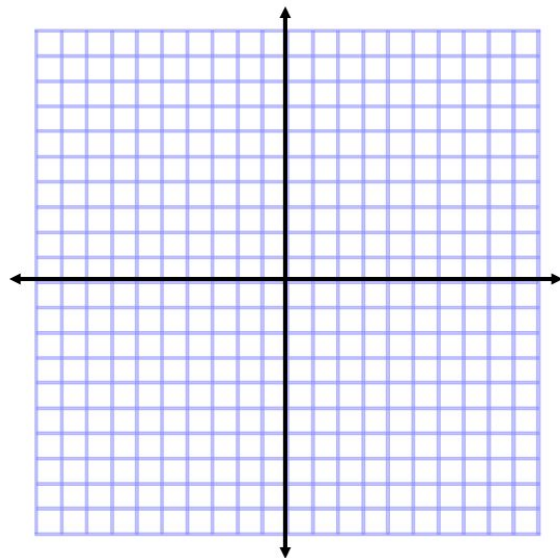
$$+\frac{1}{5}x \quad \quad +\frac{1}{5}x$$

- Then, I will write the equation. I cannot add -8 and $\frac{1}{5}x$, because they are not like terms. **So, the equation is: $y = \frac{1}{5}x + 8$**

5. $2x + y = -5$



6. $-\frac{2}{3}x + y = 1$



Part Three: Solving Inequalities: Activate your prior knowledge and solve each inequality. Remember, solving inequalities is just like solving equations with one exception: if you multiply or divide by a negative number, the inequality sign flips. **Graph your solution on the number line.**

7. $5x + 7 > 32$

8. $-10y \leq 40$

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